A Case of Balantidiosis Treated with Emetin.—R. AXTER-HASENFELD (*München. med. Wchnschr.*, 1915, lxii, 152) reports a case of balantidiosis treated with emetin. For four months, the patient, a woman, aged sixty years, had suffered with a severe diarrhea. She had been given various remedies, she said, without result. There were as many as twelve watery stools daily, containing pus and blood. The patient was weak and emaciated. On physical examination, the internal ternal organs were normal, except the colon. The stools showed Balantidium coli, as many as ten in a field, actively motile. The author administered uzara at first with slight improvement. The patient, however, was still having about eight stools a day. Then he gave 0.03 gm. of emetin hypodermically. In the following twenty-four hours, the patient had only one stool. The same dose was repeated daily until eight doses had been given. The consistency of the stools became firmer, the pus disappeared. After the third injection, the balantidia could no longer be found. The patient was permanently relieved. As balantidiosis is rare in the author's practice, and as the result of emetin treatment was so brilliant, the case is reported in the hope that others may determine whether the drug is a specific in this infection.

The Extent of Protein Digestion in the Presence of Hydrochloric Acid Deficit.—At the suggestion of Prof. Krehl, L. PEL (*Deutsch. Arch. f. klin. Med.*, cxii, 369) has attempted to determine whether the hydrochloric acid deficit sometimes observed after test breakfasts or test meals necessarily means extended cleavage of protein. For the determination of free hydrochloric acid and hydrochloric acid deficit he has employed Günzburg's reagent as indicator. The total acidity has been estimated with litmus paper. The total chlorides were estimated by the method of Lüttke and Martius. An approximation of the extent of proteolysis has been arrived at by determining total nitrogen (Kjeldahl) and amino-nitrogen by the method of Van Slyke. All the values have been calculated on the basis of 100 c.c. gastric juice and also on the basis of 100 gram nitrogen. The acidity has been expressed in cubic centimeters of tenth normal NaOH, the nitrogen in cubic centimeters of tenth normal NH_3. The binding or uniting power (Bindungsvermogen) has been calculated; if free HCl is present this represents the difference between total HCl and free HCl, while with a deficit it is the sum of the deficit and the total HCl. The author has made numerous observations on the filtrates from test breakfasts and test meals. His general conclusions are as follows: (1) The amino-nitrogen, measured by Van Slyke's method, is generally higher relatively after a test dinner than after a test breakfast. (2) The amino-nitrogen, as compared with the total nitrogen, is increased in some cases with hydrochloric acid deficit, not in others. For example, the author found 9 per cent. amino-nitrogen with a deficit of 119 in one case, 14 per cent. amino-nitrogen with free HCl of 68 in another. (3) The HCl-binding power and the amino-nitrogen content, given a like quantity of total N, do not necessarily run parallel, though in some cases one does find high binding power and high amino-nitrogen combined. Extended cleavage of protein is, therefore, not the only reason for high HCl-binding power. Rather it must be supposed that the special nature of the undigested or slightly digested proteins is

responsible in many cases. (4) The HCl-binding power is increased in some cases of deficit not in others. It is practically never sufficiently increased to account for the deficit alone. (5) Among the causative factors in the production of a deficit the most important is an acid secretion inadequate for the amount of nitrogenous bodies present. Differences in the degree of cleavage of the proteins is of secondary importance. Thus in two cases with practically the same HCl-binding power and the same degree of cleavage the free acid was 68 in the one with a deficit of 24 in the other. (6) Thus there are two kinds of deficit, the one with normal protein digestion the other with abnormally extensive hydrolysis of the portein. So far Pel has been able to discover no differential diagnostic value through determining which of these is present.

Nucleinic Acid in Blood Diseases.—W. KONNECKE (*Deutsch. Arch. f. klin. Med.*, 1914, cxv, 177) has undertaken the study of experimental leukocytoses in primary blood diseases, as the results recorded in literature have to do almost entirely with the reaction obtained in normal individuals or those whose blood has been only secondarily affected. Of the various substances employed to produce a leukocytosis, Könnecke found sodium nucleinate given intramuscularly was the most suitable. It was found that the effects of the sodium nucleinate varied according to the functional ability of the bone marrow. Thus, a normal bone marrow whose cells mature more rapidly under the action of nuclein sends a larger number of ripe cells into the blood stream; the result is a moderate leukocytosis. The bone marrow in chlorosis and many secondary anemias (post-hemorrhagic, for example) is hypersensitive, the result being a more marked leukocytosis. In pernicious anemia and many forms of secondary anemia, on the other hand, the marrow was less sensitive than normal, or entirely insensitive to nuclein. In other words, the leukocytosis was slight or entirely lacking. In lymphatic leukemia only the myeloid system reacts. Severe cases of myeloid leukemia show no reaction to nuclein. In mild cases there is a decrease in the total white count following the first injection, due, Könnecke says, to lessening in the number of immature cells. After repeated injections, a leukocytosis may supervene, but if the injections are long continued, the organism becomes accustomed to the irritant and fails to react. The result of the reaction to sodium nucleinate permits one to draw certain conclusions as to the functional ability of the bone marrow, Könnecke says, which may be of value both in diagnosis and prognosis.

A Study of the Kidney Function in Congenital Cystic Kidney.—W. H. VEIL (*Deutsch. Arch. f. klin. Med.*, 1914, cxv, 156) has had the unusual opportunity of studying carefully three cases of congenital cystic kidney diagnosed clinically. His attention was directed especially to the examination of the functional capacity of the kidneys. In all three cases there were bilateral, palpable, polycystic renal tumors. In all of the cases the results of the functional study was the same. Veil found a marked decrease in the ability of the kidney to secrete a concentrated urine, though the diluting power was retained. This inability to concentrate was shown by the passage of normal quantities